



TECHNICAL NOTE BPLA-19742

STATEMENT REGARDING THE LOG4J
VULNERABILITY CVE-2021-44228

Technical Note
REV 1.3

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1. REVISION HISTORY

Revision	Date	Description
1.0	Dec 14, 2021	Initial version.
1.1.	Dec 15, 2021	Added information about 3rd party products
1.2	Dec 16, 2021	Clarifications and detailed information about optional products (ongoing investigation)
1.3	Dec 20, 2021	Final investigation results have been included.

2. OVERVIEW

Stegmann Systems has investigated the impact of the log4j vulnerability CVE-2021-44228 on PLA and its add-ons.

Vulnerable library: log4J version 2.0.0 – 2.14.1

2.1 Summary

Starting from PLA 3.0.4 no component of PLA makes use of Log4J in any version. In earlier versions only the Microsoft Excel Data Acquisition Module make use of Log4J 1.2.13, which is not affected by the vulnerability.

The vulnerability CVE-2021-44228 can potentially impact all Java-based programs such as PLA 3.0 or others. Stegmann Systems can confirm that PLA 3.0 does not make use of log4j version 2.0.0 – 2.14.1 in all of its components or optional add-ons.

Only the Microsoft Excel Data Acquisition Module Version 1.0.0 for PLA 3.0.2 and Version 1.1.0 for PLA 3.0.3 has made use of Log4J Version 1.2.13 which is NOT affected by the vulnerability. Starting from Microsoft Excel Data Acquisition Module Version 1.2.0 (for PLA 3.0.4) Log4J is no longer used in that Data Acquisition Module. In no other add-on Log4J has been used.

2.2 Optional Removal of Log4J Version 1.2.13

The Microsoft Excel Data Acquisition Module Version 1.0.0 for PLA 3.0.2 and Version 1.1.0 for PLA 3.0.3 has made use of Log4J Version 1.2.13 which is not affected by the vulnerability. Starting from Version 1.2.0 for PLA 3.0.4 Log4J is no longer used in that Data Acquisition Module.

By installation of a newer version of the module the Log4J Library is being removed from the system. However, if you have made use of version 1.0 oder 1.1 of the Microsoft Excel Data Acquisition Module your security scanners might detect version 1.2.13 of the Log4J library in certain user profiles of users which did not use PLA after the update.

In the Appdata subfolder a cache folder for PLA exists. This cache folder is automatically updated after installation of a newer version when the user starts PLA. Administrators who wish to remove any version of Log4J from their system can remove the folder

`%localappdata%\Stegmann Systems\PLA 3.0\config\org.eclipse.osgi`

from those user profiles without any risk of function loss while the users are not running the application.

3 DETAILS

3.1 PLA Framework

No version of the PLA Framework is impacted.

Product	Versions	Log4J version	Notes	Vulnerable to CVE-2021-44228
PLA	1.0 - 1.2	N/A	No java code is used in PLA 1.x	NO
PLA	2.0 – 2.1	N/A	The java code does not make use of Log4J	NO
PLA	3.0.0 – 3.0.6	N/A	The java code does not make use of Log4J	NO

This includes all 3rd party products used by PLA. Gemalto Sentinel Runtime is also not affected by the vulnerability.

3.2 Statistical Addons and Report Addons

PLA statistical addons are not based on Java Code and therefore cannot include or execute Java code. Therefore, they are not affected.

PLA report packages or addons are not based on Java Code and therefore cannot include or execute Java code. Therefore, they are not affected.

3.3 Data Acquisition and Import Modules Modules

The analysis of PLA Data Acquisition Modules (DAM) and Import Modules (IM) has been finished.

Product	Versions	Used in PLA	Log4J version	Vulnerable to CVE-2021-44228
Archive IM	1.0.0 – 1.1.1	3.0.4	N/A	NO
	1.2.0 – 1.3.0	3.0.5 – 3.0.6	N/A	NO
Ascent DAM	1.0.0	3.0.4	N/A	NO
Cytiva Biacore™ DAM	1.1.0	3.0.4	N/A	NO
	1.2.0	3.0.5 – 3.0.6	N/A	NO
Bio-plex IM	1.0.0	3.0.3	N/A	NO
	1.1.0 – 1.2.0	3.0.4	N/A	NO
FCS Reticount DAM	1.0.2	3.0.3	N/A	NO
	1.1.0	3.0.4	N/A	NO
Gen5™ DAM	1.0.0	3.0.2	N/A	NO
	1.1.0	3.0.3	N/A	NO

Product	Versions	Used in PLA	Log4J version	Vulnerable to CVE-2021-44228
	1.2.1	3.0.4	N/A	NO
	1.3.0	3.0.5 – 3.0.6	N/A	NO
Luminex IM	1.0.0 – 1.1.0	3.0.4	N/A	NO
Microsoft Excel DAM	1.0.0	3.0.2	1.2.13	NO (1)
	1.1.0	3.0.3	1.2.13	NO (1)
	1.2.0	3.0.4	N/A	NO
	1.3.0	3.0.5 – 3.0.6	N/A	NO
Sartorius Scale DAM	1.1.0	3.0.2	N/A	NO
SoftMax® Pro DAM	1.1.0 – 1.2.0	3.0.2	N/A	NO
	1.3.0	3.0.3	N/A	NO
	1.4.0 – 1.5.1	3.0.4	N/A	NO
	1.6.0	3.0.5 – 3.0.6	N/A	NO
	1.7.0	3.0.5 – 3.0.6	N/A	NO
Tecan Magellan DAM	1.0.4	3.0.2	N/A	NO
	1.1.0 – 1.2.0	3.0.3	N/A	NO
	1.3.0	3.0.4	N/A	NO
	1.4.0	3.0.5 – 3.0.6	N/A	NO
Text DAM	1.0.1	3.0.2	N/A	NO
	1.1.0	3.0.3	N/A	NO
	1.2.0	3.0.4	N/A	NO
	1.3.0	3.0.5 – 3.0.6	N/A	NO

(1) Log4J version 1.2.13 is not affected by CVE-2021-44228. Starting from Microsoft Excel Data Acquisition Module version 1.2.0 Log4J is no longer used.